

# Guidelines for Estimating Elk Cow Calf Costs Based on a Herd of 15 Cows

Date:February, 2000

This guide is designed to provide planning information and a format for calculating costs of production on a 15 elk cow calf enterprise. The production costs included in this enterprise budget are not intended as a cost study of the elk industry in Manitoba.

The budget estimates are based on a number of assumptions which are clearly defined in the supporting pages. Input costs are based on recommended practices and/or information obtained from producers. Good management is assumed in that a balanced ration is being fed, livestock are on a herd health program and handling facilities are included.

The budget may be adjusted by putting your figures in the appropriate column. Each producer is encouraged to determine their own costs of production based on their own inputs, pasture program and management.

# **ELK COW-CALF PRODUCTION COST SUMMARY - 2000**

(Based on a 15 head cow herd)

A. OPERATING COSTS	\$/COW	\$ TOTAL	<b>Your Cost</b>
1. Feed Costs:			
1.01 Hay	\$86.40	1,296	
1.02 Grain	\$17.96	269	
1.03 Supplement	\$52.57	789	
Total Feed Cost	\$156.93	\$2,354	
2. Other Operating Costs:			
2.01 Vet. Medicine & Supplies	\$105.09	\$1,576	
2.02 Fuel, Mtce. & Repairs	\$53.34	\$800	
2.03 Utilities	\$20.00	\$300	
2.04 Death Loss	\$100.00	\$1,500	
2.05 Insurance	\$90.92	\$1,364	
2.06 Herd Replacement	\$583.33	\$8,750	
2.07 Land Taxes	\$10.00	\$150	
2.08 Miscellaneous	\$8.33	\$125	****
Subtotal Operating Costs	\$1,127.94	\$16,919	
2.09 Operating Interest	47.94	\$719	
TOTAL OPERATING COSTS	\$1,175.88	\$17,638	
B. FIXED COSTS			
3. Depreciation			
3.01 Buildings	\$59.70	\$896	
3.02 Machinery & Equipment	\$11.11	\$167	
3.03 Fence	\$27.00	\$405	
4. Investment			
4.01 Buildings	\$40.13	\$602	
4.02 Machinery & Equipment	\$5.65	\$85	
4.03 Livestock	\$586.67	\$8,800	
4.04 Pasture Land & Fencing	\$40.15	\$602	-
TOTAL FIXED COSTS	\$770.41	\$11,556	
C. LABOUR COSTS	\$150.00	\$2,250	
TOTAL COST OF PRODUCTION	\$2,096.29	\$31,444	

#### **ELK COW-CALF PRODUCTION COST WORKSHEET - 2000**

# **Assumptions**

- 1. This budget outlines the cost of production for an elk cow calf enterprise with 15 elk cows, 1 herd bull and a 90% calf crop.
- 2. All feed is valued at fair market value.
- 3. Handling facilities include chutes and squeeze specifically designed for elk.
- 4. This budget assumes all replacements are purchased. Replacement rates on elk cows used are 10% and rates on the herd bulls are 50%.
- 5. Insurance rates used were for accidental insurance only; not full mortality.

				<b>Your Cost</b>
A. OPERATING C	OSTS			
1. Feed Costs:				
1.01 Hay Costs				
Cows		5.00	kg hay/day	
	×	270	days/year	
	+	1,000	kg/tonne	
	×	\$60.00	/tonne	
	=	\$81.00	/cow	
Bulls		5.00	kg hay/day	
	×	270	days/year	
	4	1,000	kg/tonne	
	×	\$60.00	/tonne	
	+	15	cows	
	=	\$5.40	/cow	
Total		\$86.40	/cow	

				Your Cost
1.02 Grain Cost	s			
Cows		0.50	kg oats/day	
00113	x	270	days/year	-
	+	1,000	kg/tonne	
	×	\$105.00	/tonne	
	_	\$14.18	/cow	
	-	\$14.10	/COW	-
Bulls		2.00	kg oats/day	
	X	270	days/year	
	+	1,000	kg/tonne	
	X	\$105.00	/tonne	
	+	15	cows	
	=	\$3.78	/cow	
				-
Total		\$17.96	/cow	
1.03 Supplemen	t Cos	ts		
Cows		0.50	kg supplement/day	
	X	365	days/year	
	+	1,000	kg/tonne	
	×	\$270.00	/tonne	-
	=	\$49.28	/cow	-
		•		
Bulls		0.50	kg supplement/day	
	X	365	days/year	
	4	1,000	kg/tonne	
	x	\$270.00	/tonne	
	+	15	cows	
	=	\$3.29	/cow	
Total		\$52.57	/cow	
Other Operating	g Cost	ts:		
2.01 Veterinary	Medic	ine & Suppli	08	
Cows		\$20.00	parasite control	
Calf		\$1.00	blackleg control	
	×	90	% calf crop	

				Your Cos
	=	\$0.90	/cow	
D. II		600.00		
Bull		\$20.00	parasite control	
	<u>+</u> =	<u>15</u>	cows	
	=	\$1.33	/cow	
DNA & I	Blood T	esting		
Calves		\$64.20	DNA profile	
	+	\$21.40	blood test	
	+	\$10.00	vet fees	
	=	\$95.60	total cost/calf	
	x	13	calves/year	
	÷	15	cows	
	=	\$82.85	/cow	
		402.00	7001	
Total		\$105.09	/cow	
	epairs		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
2.02 Fuel, Oil, R	epairs	& Maintena	nnce	
		<b>&amp; Maintena</b> \$200.00	annual fuel cost	
2.02 Fuel, Oil, R	+	& Maintena \$200.00 \$200.00	annual fuel cost oil, repairs & maintenance	
2.02 Fuel, Oil, R	+ =	<b>&amp; Maintena</b> \$200.00 \$200.00 \$400.00	annual fuel cost oil, repairs & maintenance total cost	
2.02 Fuel, Oil, R	+ = +	<b>&amp; Maintena</b> \$200.00 <b>\$200.00 \$400.00</b>	annual fuel cost oil, repairs & maintenance total cost cows	
2.02 Fuel, Oil, R	+ =	<b>&amp; Maintena</b> \$200.00 \$200.00 \$400.00	annual fuel cost oil, repairs & maintenance total cost	
2.02 Fuel, Oil, R	+ = + =	<b>&amp; Maintena</b> \$200.00 <b>\$200.00 \$400.00</b>	annual fuel cost oil, repairs & maintenance total cost cows	
2.02 Fuel, Oil, R Machinery	+ = + =	<b>&amp; Maintena</b> \$200.00 \$200.00 \$400.00 <u>15</u> \$26.67	annual fuel cost oil, repairs & maintenance total cost cows /cow	
2.02 Fuel, Oil, R Machinery	+ = + =	<b>&amp; Maintena</b> \$200.00 \$200.00 \$400.00 \frac{15}{26.67} \$400.00	annual fuel cost oil, repairs & maintenance total cost cows /cow annual repair & mtc.	
2.02 Fuel, Oil, R Machinery	+ = + = es etc.	<b>&amp; Maintena</b> \$200.00 \$200.00 \$400.00 \$26.67 \$400.00 15	annual fuel cost oil, repairs & maintenance total cost cows /cow annual repair & mtc. cows	
2.02 Fuel, Oil, R Machinery Buildings, Fence Total	+ = + = es etc. + =	\$ Maintena \$200.00 \$200.00 \$400.00 \frac{15}{26.67} \$400.00 \frac{15}{26.67}	annual fuel cost oil, repairs & maintenance total cost cows /cow annual repair & mtc. cows /cow	
2.02 Fuel, Oil, R Machinery Buildings, Fence	+ = + = es etc. + =	<b>&amp; Maintena</b> \$200.00 \$200.00 \$400.00 \$15 \$26.67 \$26.67 \$53.34	annual fuel cost oil, repairs & maintenance total cost cows /cow annual repair & mtc. cows /cow	
2.02 Fuel, Oil, R Machinery Buildings, Fence Total	+ = + = es etc. + =	\$ Maintena \$200.00 \$200.00 \$400.00 \frac{15}{26.67} \$400.00 \frac{15}{26.67}	annual fuel cost oil, repairs & maintenance total cost cows /cow annual repair & mtc. cows /cow	
2.02 Fuel, Oil, R Machinery Buildings, Fence Total	+ = + = es etc. + =	<b>&amp; Maintena</b> \$200.00 \$200.00 \$400.00 \$15 \$26.67 \$26.67 \$53.34	annual fuel cost oil, repairs & maintenance total cost cows /cow annual repair & mtc. cows /cow	

				<b>Your Cost</b>
2.04 Death Loss	3	412		
	X	\$10,000	/cow investment	
	X	<u>1.0</u>	(%) mortality rate	
	=	\$100.00	/cow	
2.05 Insurance				
		\$22,300	bldg. & equip. investment	
	X	\$0.60	cost/\$100 capital	
	+	100		
	+	15	cows	
	=	\$8.92	/cow	
		\$160,000	herd investment	
	×	\$0.75	cost/\$100 capital	
	+	100		
	+	15	cows	
	=	\$80.00	/cow	
		\$30	add'l coverage for liability	
	+	15	cows	
	=	\$2.00	/cow	
Total		\$90.92	/cow	
2.06 Herd Repla	ceme	ent		
Cows		\$10,000	/replacement heifer	
	-	\$5,000	/cull cow	
	=	\$5,000	net cost	-
	×	10.00	% replacement rate	-
	=	\$500.00	/cow	
Bulls		\$10,000	/replacement bull	
	-	7500	/cull bull	
	=	\$2,500	net cost	
	x	50%	% replacement rate	
		15	cows	
	<u>+</u> =	\$83.33	/cow	
			/cow	

# **Elk Cow Calf Costs**

			<b>Your Cost</b>
2.07 Land Taxes			
	\$150	land taxes	
±	15	cows	
-	\$10.00	/cow	
2.08 Miscellaneous			
	\$25.00	antler removal course	
+	\$100.00	license fee	
+	15	cows	•
=	\$8.33	/cow	
2.09 Operating Inter	est		
	\$1,127.94	subtotal operating costs	
+	2	average	
X	8.50	% operating interest rate	
=	\$47.94	/cow	

		Your Cost
B. FIXED COSTS		
	ital Investment	
Buildings & Improvements	244.000	
Handling Facilities	\$14,000	
Waterers (2 @ \$ 1000)	\$2,000	
Well & Pressure System	\$3,500	-
Hydro (1 pole @ \$400)	\$400 \$400	
Total Cost	\$19,900	-
Machinery		
Tractor & Loader	\$2,000	
Miscellaneous Machinery	\$400	
Total Machinery Cost	\$2,400	
Land		
Fence (.75 miles @ \$12,000/mil	(e) \$9,000	
Pasture (20 ac @ \$300)	\$6,000	
Total Fence & Pasture	\$15,000	
Livestock		
Cows (15 @ \$10,000)	\$150,000	
Herd Bulls (1 @ \$10,000)	\$10,000	
Total Livestock Cast	\$160,000	
Total Livestock Cost	\$100,000	
Total Capital Investment	\$197,300	
3. Depreciation: Original	Value - Salvage Value	
o. Depreciation.	Useful Life	
3.01 Buildings & Improvements	•	
\$19,900	original value	
- \$1,990	salvage value	
÷ 20	years useful life	
+ <u>15</u>	cows	
= \$59.70	/cow	
3 02 Machinery & Equipment		

				Your Cost
Tractor & Loade	Г	\$2,000	original value	
	X	100.00	% usage for Elk	
	=	\$2,000	portion for elk	
	-	\$600	salvage value	
	=	\$1,400	net cost	
	+	10	years useful life	
	+	<u>15</u>	cows	
	=	\$9.33	/cow	
Miscellaneous		\$400	original value	
		\$80	salvage value	
	=	\$320	net cost	
	+	12	years useful life	
	+	15	cows	
	=	\$1.78	/cow	
Total		\$11.11	/cow	
3.03 Fence				
		\$9,000	original value	
		\$900	salvage value	
	+	20	years useful life	
	+	15	cows	
	=	\$27.00	/cow	
I. Investment:				
		Original Val	lue + Salvage Value	x Investment Rate
			2	
4.01 Buildings &	Impr	ovements		
		\$19,900	original value	
	+	\$1,990	salvage value	
	+	2	average	
	×	5.50	investment rate	
	+	15	cows	
	=	\$40.13	/cow	

			Your Cost
4.02 Machinery & E	Equipment		
Tractor and Loade	r \$2,000	original value	
	x 100.00	% usage for Elk	
	= \$2,000	portion for elk	
	+ \$600	salvage value	
	= \$2,600	net cost	-
	+ 2	average	
	x 5.50	investment rate	
	+ 15	cows	
	= \$4.77	/cow	
Miscellaneous	\$400	original value	
	+ \$80	salvage value	
	= \$480	net cost	
	+ 2	average	
	x 5.50	investment rate	
	+ 15	cows	
	= \$0.88	/cow	
	= \$0.00	/cow	
Total	\$5.65	/cow	
.03 Livestock			
Cows	\$10,000	/cow	
	x 5.50	investment rate	
	= \$550.00	/cow	
Bulls	\$10,000	/bull	
	+ 15	cows	
	= \$667	/cow	
	x 5.5	investment rate	
	= \$36.67	/cow	
Total	\$586.67	/cow	

			Your Cost
4.04 Pasture Land & F	encing		
Fence Investment	\$9,000	original value	
+	900	salvage value	-
=	\$9,900	total value	
+	2	average	
x	5.50	investment rate	
+	15	cows	
=	\$18.15	/cow	
Land Investment	\$6,000	original value	
X	6	investment rate	
+	15	cows	
=	\$22.00	/cow	
Total	\$40.15	/cow	
C. LABOUR COSTS			
	15	annual hours per cow	
×	\$10.00	hourly labour rate	
	\$150.00	/cow	

For more information contact your local Manitoba Agriculture and Food office.

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